APPENDIX

NOTES FOR FOMC MEETING
SEPTEMBER 20, 1988
SAM Y. CROSS

At the time of the August FOMC meeting, the dollar was still under strong upward pressure. Reports on U.S. economic activity indicated that our economy was growing strongly, and market participants were of the view that the Federal Reserve would take additional measures to counter any buildup in inflationary pressures. The prospects of high U.S. interest rates and favorable differentials prompted good investor and commercial demand for dollars and encouraged traders to bid the dollar higher. Thus, when you last met, the dollar had risen by about 14 percent against the mark from the levels of late spring. Our exchange rate was proving to be extremely resilient, and the dollar seemed poised to move even higher in the short term.

In response to these upward pressures, the U.S. and other monetary authorities intervened actively. On our part, we sold around $1.3 billion between August 17 and August 23, the first week after the last FOMC meeting. The Bundesbank at the same time sold in active intervention (plus in rechannelling) and other central banks' coordinated sales totaled more than $600 million. The market was impressed by the degree of coordination among the central banks, and the operations appeared to send a clear signal to the market that the authorities would see a higher dollar as a potential threat to the adjustment process. The peak for the dollar against the mark during the period was reached on August 22, when it rose to just over DM 1.92.

In late August, however, the dollar's upward momentum either ended or at least stalled. The market became wary about trying to push the dollar higher in light of the increasingly active intervention operations and the fact that these operations were reinforced by official commentary both here and abroad expressing dissatisfaction with any higher levels of the dollar against the mark. Then, in an important move on August 25, several European central banks acted to raise their official interest rates, an action which promised to narrow those differentials which had helped to support the dollar throughout the recent period. Although these European interest rate increases were in part prompted by domestic considerations, the markets saw the moves as clearly aimed at supporting the European currencies. In the case of Germany, the increase in the discount rate was accompanied by a strong statement from Bundesbank President Poehl promising to do whatever was needed to support the mark exchange rate, in terms of intervention and policy moves, and to show they were serious, the Bundesbank immediately and forcefully sold within three-quarters of an hour right after Poehl's statement.

In these circumstances, the upward pressures on the dollar eased, and eased further as economic data from the United States suggested that the economy might be growing at a less rapid and more sustainable pace than had been thought before. This view was reinforced by the release of employment data in early September which showed a slower growth in employment and less pressure on wages than the market had previously anticipated, and which led to an easing of the exchange rate.

The dollar has shown a smaller rise against the yen in recent months than against the European currencies. Thus, over the course of the summer the yen strengthened against the mark and its associated continental currencies, even though the Germans acted much more forcefully to support their currency through intervention and through increases in official interest rates. In part, this difference seems to reflect a market view that Japan has adapted more successfully than others to the rise in its currency over the past several years and also a feeling that over time a stronger yen is inevitable given the structure of the world economy and the widespread belief that Japan must undertake a large share of the needed international adjustment.

By early September the dollar had eased back from its highs against both the mark and the yen, and had started to trade in relatively calm markets. There was no U.S. intervention in the three-week period after August 23. Economic statistics released here and abroad during that period did not seem to point to a need for significant policy shifts. The dollar traded within a relatively narrow range throughout much of September. Last Wednesday it threatened to push above this trading range when the market received the favorable news of the smaller than expected U.S. trade deficit during July. News that the trade adjustment was continuing led some market participants to bid the dollar up sharply. In order to show a continued presence and concern, the Desk intervened on the day of the announcement after the dollar popped up by several pfennings and approached levels at which we had seen intervening before. We did not enlist a cooperative effort for the intervention at that time; we intervened alone and not aggressively, and sold a relatively modest $130 million against marks. Since then, the dollar has been trading comfortably and relatively quietly, around the middle of its trading range. I think market participants have a sense that the factors that were causing the upward pressure earlier are now much less evident; also that the central banks are committed to fostering stability and will seek to limit any major rate change by intervention and policy moves.

I would like to seek your approval for the sale of $718 million against marks, which is the Federal Reserve's share of the intervention activity during the intermeeting period. In other operations, the Desk bought $32.1 million equivalent of Japanese yen from customers on behalf of the Federal Reserve to augment yen reserves. The Desk also purchased $500 million equivalent of Japanese yen from for the Treasury and half of that amount was later purchased by the Federal Reserve.

A further $1 billion of yen will be purchased from in two installments, this month and next month, and one half of that will also be taken by the Federal Reserve. I would further like to report that the Bank of Mexico repaid all of its outstanding obligations under the swap agreements with the U.S.

Treasury and the Federal Reserve, repaying the full amount of $700 million to the Federal Reserve and $300 million to the U.S. Treasury. The Central Bank of Brazil repaid $232.5 million of its swap agreement with the U.S. Treasury on August 26.

Notes for FOMC Meeting

September 20, 1988

Peter D. Sternlight

Domestic Desk operations saw relatively smooth sailing since the last meeting of the Committee. Intended reserve pressures remained unchanged, with the borrowing allowance holding at $600 million, and actual borrowings came in very close to that level. Individual weeks were no more than $50 million off the mark and two-week averages were even closer, setting a standard we probably can't maintain. The associated expectation for Federal funds trading was a range of 8 to 8-1/4 percent, and here, too, actual experience fell into a very tight band--perhaps too tight a band, lest it foster unrealistic expectations--with statement period averages clustered within a few basis points of 8-1/8 percent. Market sentiment did undergo some shift, though, as business news starting with the August employment report on September 2, tended a bit to the softer side. This led market participants to back away from anticipations of immediate further policy tightening moves and caused most yields to decline somewhat. Still, the prevailing underlying sentiment seemed to be that the economy remained strong, the inflationary threat was still there, and restraining moves were still likely to be needed, albeit with some delay. Monetary growth, meantime, was moderate over the period, with the M2 and M3 measures running a shade below the June-September pace specified by the Committee, and M1 slowing sharply in August and early September after a strong gain in July.

Reserve needs were moderate through most of the period, and were met largely through repurchase agreements. A few occasions of over-abundant reserves were handled through matched sale-purchase transactions in the market. Ordinarily, greater and more durable reserve needs would be showing up at this time of year, but in part the need has been met by the System's foreign currency acquisitions--both from occasional market intervention and from some special transactions arranged with foreign monetary authorities. Moreover, the subdued growth of money, especially transaction balances, meant that required reserves showed little change. A greater reserve need has developed in the last few days, though, accentuated by the post-tax-date rise in Treasury balances at the Fed, and this has caused us to buy some bills outright from foreign accounts (about $1.2 billion from just after Labor Day through yesterday), and to arrange larger injections of reserves through repurchase agreements. The large reserve need is seen as abating quite abruptly once we get into October, however, so we have not undertaken the sizable outright purchases in the market that often have come at this time in past years.

In the early part of the period, interest rates showed no pronounced trend. Activity was quite light, reflecting both seasonal slack and investor caution in the face of reports that mainly seemed to emphasize strong expansionary momentum in the economy. In part, the market reacted day-to-day to small moves in the dollar, mainly showing strength, but falling back when the dollar weakened after a series of foreign rate increases on August 25. The August U.S. employment report, released just before the Labor Day weekend, suggested a blunting of the economy's momentum, with a sizable downward revision of nonfarm jobs in July, an August job gain that was moderate by recent standards, a decline in hours worked and virtually no change in hourly earnings. These data produced a one-day burst of demand for securities that encountered thin street supplies and caused prices to jump nearly three points on the day. Subsequently, demand abated but prices essentially held their higher ground in light of two-way trading, as profit taking was offset by some fresh demand in response to other indications of more moderate expansion or slackened inflationary push. After the employment report, participants eagerly awaited the July trade data released September 14. This report also lifted prices, as the market took heart from the smaller deficit and especially the big drop in imports, but the market impact was soon muted by a rise in oil prices after big declines earlier, and by somewhat stronger than expected reports on industrial production.

For the whole period, yields on most Treasury coupon issues declined by about 25 to 45 basis points, with the larger declines in the longer maturities. This left the 30-year bond yield in the neighborhood of 9 percent. This morning it is about 9.06 percent. The Treasury added about $6-1/2 billion in coupon-bearing debt over the period. One factor that may have added to demand at the longer end is the recently increased amount of coupon stripping. Foreign demand was said to be quite good for stripped issues. A lingering uncertainty throughout the period has been the fate of the Treasury's long-bond authority. Pending bills to provide technical adjustments to recent tax legislation would remove the 4-1/4 percent rate ceiling on bonds that has hobbled Treasury financing efforts for many years, but there is no consensus on whether the Congress will get to this legislation in the few weeks remaining before adjournment of the current session. If they don't get to it now, it could well keep the Treasury out of the bond market until next May.

In the Treasury bill market, rate changes were mixed over the period, with longer maturities down slightly but shorter issues--notably the three-month area--up about 15 basis points. The rise in short bill rates reflected a changing balance of supply and demand. After an extended period of paying down bills--despite the large deficits--the Treasury has been adding to weekly bill issuance this past summer. Also, some short-term cash management bills were sold in late August. In all, total bill supplies were increased by about $15 billion over the period. Meantime, with the dollar remaining fairly strong there were occasional sales of bills by foreign central banks supporting their currencies. In yesterday's auctions of three-and six-month bills the average rates were 7.17 and 7.34 percent respectively, compared with 7.05 and 7.51 percent at mid-August.

Turning briefly to the market in securities of federally sponsored agencies, particularly those related to the thrift institutions, the recent period was perhaps notable for the absence of any significant change in spreads over Treasury issues, which some observers might have looked for given the growing perception of the size of the thrift problems. Federal Home Loan Bank and FICO issues retained their spread relationships to Treasury issues as investors and dealers apparently consider these securities ultimately to have some degree of Federal Government backing--however hard it is to pin down precisely to the satisfaction of lawyers and accountants.

Yet another area that might have been jolted in the recent period was that of high-yield or "junk" bonds. The long expected SEC charges against Drexel Burnham and several of its key employees have been received fairly calmly--in good part, I believe, because the firm is perceived to be financially strong and able to weather a tough and lengthy fight. There is also the feeling, to be sure, that if Government charges can be proven it will have a very severe impact on the firm--but that could be a long way off, and the outcome is considered quite uncertain.

As to what the market looks for now from the economy and from monetary policy, I think the preponderant expectation is for further expansion and greater inflationary pressure, but with some recent respite of pace seen as calling for no immediate policy move. Most observers expect that, when changes do come, they will continue on the restraining side.

Michael J. Prell
September 20, 1988

FOMC BRIEFING

I can be relatively brief, Mr. Chairman, for the incoming information since the last meeting has not caused us to make any substantial changes in our forecast.

In the Greenbook write-up, we emphasized that we had relatively few new data, and that those we did have had been so volatile that it was almost impossible to extract the signal from the noise. However, we did feel we should trim a bit off of GNP growth in the current quarter, largely on the basis of the weaker than expected labor market report for August, which showed a sharp drop in production worker hours and a rise in the unemployment rate.

Since the Greenbook forecast was completed, we have received a few more pieces of data -- most notably those on merchandise trade and retail sales. The trade release showed an even sharper decline in the deficit in July than we had expected, but from an upward revised June level. In contrast, the retail sales release showed a softer July-August picture than we had anticipated, after a strong, upward revised June gain. All told, and with due allowance for the statistical reliability of these monthly figures, we would not be inclined to change our forecast appreciably at this point.

As we see it, the basic story is that the nonfarm economy probably is starting to decelerate from the strong pace of the first half. However, it does not appear likely that growth will move below the 2-1/2 percent trend of potential output until early next year. And, absent some unanticipated development in the next couple of quarters -- for example, the emergence of a significant inventory overhang -- it appears to us that interest rates will have to rise further in order to hold nonfarm output growth below 2-1/2 percent through next year. Otherwise, strong -- though slowing -- export demand, and the attendant buoyancy of domestic capital spending, might well keep the economy moving along at a pace that would maintain or increase the pressures on productive resources.

As I noted last month, if we were to change our monetary policy assumption and hold the federal funds rate at the present level, rather than allowing it to move into the 9 to 10 percent range, we would project that the unemployment rate would fall next year to something like 5-1/4 percent. We think that would bring substantial inflationary pressure.

As it is, with the jobless rate running in the 5-1/2 to 5-3/4 percent area over the next year or so, we believe it likely that wage and price inflation trends will be edging higher. Unfortunately, the recent data on wages and prices haven't done much to illuminate the degree of inflationary pressure implied by current levels of resource utilization. The increase of but 0.1 percent in the hourly earnings index for August was in striking contrast to the recent pattern, but it is too early to declare an end to the upward trend in the rate of increase for this measure. Rather, we view the August number as a source of reassurance that we are correct in projecting a much milder pickup in wages over the projection period than historical patterns might suggest is in prospect.

On the price side, the latest numbers have been buffeted by gyrations in food and energy prices. Excluding food and energy, the producer price index rose 0.3 percent in August after increasing 0.6 percent in July, and the trend in this measure of inflation clearly is still up. The July CPI, ex. food and energy, was up 0.3 percent after rising 0.4 percent in June, and the trend for this measure has been essentially flat since late last year, at around 4-1/2 percent.

The incoming evidence, however, has caused us to raise our near-term forecast of food prices. We had expected a fairly prompt response to the drought -- indeed, prompter than most outside forecasters. But the big jump in food prices in the July CPI, in particular, has led us to increase our projection noticeably in the current quarter. Assuming better supplies of grains, fruits, and vegetables next year, however, we have food price inflation slowing more now over the course of 1989.

For energy, the outlook obviously is extremely uncertain, with great dispute about the implications of the Iraq-Iran cease-fire. We've lowered our oil price path in light of recent market developments, but we recognize the possibility of decidedly lower or higher prices than the $15.50 average that we've built in for oil imports in 1989. A deviation of $5 per barrel from that level might mean a difference of 3/4 percent in CPI inflation next year, factoring in both direct and indirect effects. But while a drop in the oil price would, in effect, shift the short-run Phillips curve in a favorable direction, that shift would not be permanent. Unless resource utilization were lowered, as in our current forecast, inflation would tend to reaccelerate in 1990.

Donald L. Kohn
FOMC Briefing
September 20, 1988

In the financial markets, the intermeeting period has been marked by a considerable slowing in money growth and, as Peter has already recounted, some declines in interest rates--particularly in the longer maturities.

The deceleration of money over August and early September was largely anticipated; monetary expansion was a little less than had been projected, but not by more than would fall within the usual margin of error. Even with the slowing, M2 is in about the middle of its annual range and M3 still in the upper portion of its range. The behavior of money seems to be explainable through the impact of previous increases in interest rates, rather than an unanticipated shortfall in income. Using the staff GNP projection, velocity is estimated to have increased at a 2-1/2 percent rate in the third quarter, which is more than accounted for by interest rate effects, according to our models.

The bluebook alternatives embody the staff expectation that money growth will continue to be quite damped over coming months. Under alternative B, M2 is projected to grow at only a 3 percent rate on average through yearend, placing it somewhat below the midpoint of its long-run range. This reflects not so much developments in the economy, which is assumed to follow the track in the greenbook, but rather the lags in adjustments to previous increases in interest rates--both by depository institutions in raising offering rates and by depositors in rearranging portfolios to take account of changes in opportunity costs. As a consequence, velocity is projected to increase again in the fourth quarter, and by a little more than in the third.

Time deposit offering rates have already adjusted to a considerable extent, so most of the weakness in the fourth quarter would be in liquid deposits. In addition, demand deposits could be depressed by corporations squaring up compensating balances before yearend. Consequently, we expect very little growth in M1 on balance over coming months. M3, which is less affected by interest rates in the short run, is anticipated to grow at a 5 percent rate through yearend, remaining above the midpoint of its annual growth range.

Were M2 to continue growing at a 3 percent rate over a very extended period, nominal GNP growth of similar magnitude with substantial disinflationary pressures would likely be the result. But this need not occur over the short- or intermediate-runs. And, even a shortfall from the 3 percent M2 path would have to be evaluated in the light of other data before it could be taken as signalling a similar shortfall in income or activity relative to expectations. At the last FOMC meeting, there was some discussion of a more normal behavior of money relative to income. The staff is preparing an assessment of money demand and velocity behavior for the next FOMC meeting. At this time it may be sufficient to note that while there may be very little long-run trend in M2 velocity, and consequently a firm relationship between money and prices over time, the demand for M2 relative to income can still vary quite substantially over periods as long as several quarters, mostly owing to changes in interest rates, but also due to random disturbances and reasons that are not well understood. Just this year, velocity has already swung from minus 1-1/2 in the first quarter to plus 2-1/2 in the third, and in the past few years it has varied from minus 4 percent in 1986 to plus 2-3/4 percent in 1987.

In the staff forecast, M2 growth is expected to remain in the 3 to 4 percent area in 1989 and velocity to increase substantially further. This relationship of money and income is the result of an assessment of the underlying pressures in the economy, and a monetary policy that, as a result, is viewed as involving further increases in nominal and real interest rates if demands are to be sufficiently damped to restrain inflation. As Mike noted, the rise in short-term rates has not been reduced in the staff forecast by the incoming data. But, judging from the movements in interest rates, and some other market indicators over the intermeeting period, a significant number of market participants do not share this view. Indeed, going back a bit further to late spring, a number of financial market and related indicators, including long-term interest rates, dollar exchange rates, and some commodity prices, seem to suggest a levelling off in concerns about inflation.

While these and related measures can be useful, and encouraging, indicators of market sentiment, interpretation of their implications for future monetary policy is subject to a number of caveats.

1. The measures are volatile and can turn around rapidly in response to new information. Those of us privileged to be President Guffey's guests in Jackson Hole heard ample evidence that prices in

financial markets fluctuate more than would seem to be indicated by underlying fundamentals.

2. It is not clear to what extent the recent behavior of these measures reflects an assessment that underlying demand pressures have already subsided or whether they are also reflecting expectations that monetary policy will be tightened in a timely way as pressures emerge. For example both may be accounting for relatively flat commodity prices in the face of continued economic expansion in the industrialized world. An important role for U.S. monetary policy in this outlook is indicated by the firm tone for the dollar, even before the recent trade data, despite increases in interest rates abroad.

3. Although market expectations differ from staff expectations about the course of short-term interest rates, markets still seem to be anticipating that they will increase. The nominal yield curve, while flatter than a few weeks ago, is still upward sloping. Expectations about the course of real rates are more difficult to discern. The most recent inflation expectation surveys do not indicate a remission in near-term inflation expectations--in fact, they suggest expectations of inflation rates above 5 percent for the next year. Such expectations imply real rates in the one-year area of only about 2 to 3 percent, roughly in line with their long-term average. Long-term inflation expectations and real rates are even more problematical. The one survey available suggests some edging down of longer-term inflation expectations, which may account for some of the recent behavior of bond yields, and lower expectations over the long- than the short-run. This is

consistent with the notion that real as well as nominal rates are expected to rise.

4. Finally, even if one could discern the level of real interest or exchange rates embodied in the markets, there is no assurance that these are appropriate to accomplish the objectives of the Federal Reserve. This will depend on an assessment of the various factors affecting the outlook for the economy and prices, and views on these naturally will differ. That's why there are alternatives in the bluebook.